## BRIEFER ARTICLES.

## NOTES ON THE GENUS BARTONIA.

In August 1894, while collecting near Holyrood, on Conception Bay, Newfoundland, Mr. H. von Schrenk and the writer secured some sixty or more individuals of a Bartonia. These inconspicuous plants were collected in a small sphagnum bog near South Arm river, and in the field were taken for B. tenella Willd; but, when later compared with copious herbarium material of this species, the Newfoundland plant was found to differ in several particulars. From its alternate leaf scales and relatively long corolla (twice the length of the calyx), it was then regarded as the Centaurella Moseri' of Steudel and Hochstetter, and was accordingly distributed as Bartonia Moseri Rob. & Schrenk. But before an account of the Newfoundland collecting expedition was published it became doubtful whether the Bartonia was after all identical with the plants of Moser and Drummond upon which Centaurella Moseri was founded. Therefore, to avoid making in print the new combination Bartonia Moseri based upon indefinite material, the plant was treated as follows:2

"Bartonia sp. (Centaurella Moseri, Steud. & Hochst., acc. to Griseb., in DC. Prodr. 9: 121). A plant which appears to represent, at least in part, this rare and poorly understood species, was discovered in a small bog near Holyrood (5). The species was first described from specimens collected by Moser at Saltsburg, Pa., and Drummond at Covington, La. In his treatment of the genus in DeCandolle's Prodromus, however, Grisebach includes in it, with the mark of affirmation, a specimen collected by La Pylaie in Newfoundland. As the present plant agrees with Grisebach's description as regards alternate leaf scales and in having the corolla twice as long as the calyx, there can be little doubt that it is the plant of La Pylaie. It is, however, of lower growth, less branched, and less numerously flowered than Drummond's specimen — differences perhaps wholly due to the

First published in Griseb. Gen. et Sp. Gentianearum, 308. 1839.

<sup>&</sup>lt;sup>2</sup> ROBINSON & SCHRENK: Notes on the Flora of Newfoundland, Canad. Rec. Sci. 1896, p. 20 of reprint.

climate. The flowers, also, are mostly larger and solitary, on peduncles which are often six or nine lines long. From B. tenella the Newfoundland plant differs in its alternate leaf scales, loose few-flowered raceme, and relatively larger corolla, which in the fresh state is pinkish; also in its purplish anthers. More perfect material of the United States form of Centaurella Moseri is much to be desired."

The combination, Bartonia Moseri Rob. & Schrenk, was later published in Britton & Brown's Ill. Fl. 2:621, where it is used to cover both the United States material and the Newfoundland plant. Having just received additional specimens of the latter, collected at Grand Lake, Newfoundland, by the Rev. A, C. Waghorne, and in all regards identical with those from Holyrood, the writer has made further study of the plants in question, and is now forced to the conclusion that the Newfoundland form is distinct from any species of the United States. It may be characterized as follows:

Bartonia iodandra, n. sp.—Delicate annual, 4 to 12cm high; root a fascicle of few slender fibers; stem single, erect from a somewhat bent or decumbent base, either quite simple and terminated by a solitary flower, or alternately branched above the middle; branches 0.5 to 3cm long, erect or curved-ascending, being mostly simple leasless peduncles each bearing a solitary terminal flower, but the lowest rarely bearing 2 or 3 flowers; leaf scales alternate, subulate, 2 to 3mm long; flowers at full maturity 6 or 7mm long, distinctly purplish-tinged; calyx turbinate below, its segments ovate-oblong to oblong-lanceolate acuminate; corolla about twice the length of the calyx, when fresh of flesh color, in dried state becoming slightly yellowish but retaining even after several years a suggestion of its erubescent coloration, its segments rather broadly oblong, obtusish and mucronate; anthers at maturity deep purple or dark maroon; filaments broadened below; ovary ovoid, obtuse, surmounted by a thickish sessile short-columnar slightly bilobed stigma which is included within the corolla.—Bartonia sp. Rob. & Schrenk, Canad. Rec. Sci. 1896, p. 20 of reprint. B. Moseri Rob. & Schrenk in Britton & Brown, Ill. Fl. 2:621, as to Newfoundland locality. Centaurella Moseri Griseb. in DC. Prodr. 9: 121, in part (as to pl. of La Pylaie), not Steud. & Hochst .-- Collected by B. L. Robinson and H. von Schrenk in sphagnum near Holyrood, Newfoundland, August 23, 1894, no. 5; also by Rev. A. C. Waghorne in bogs near Grand Lake, Newfoundland, August 11, 1897; these stations being nearly 200 miles apart.

B. TENELLA Willd., which is rather widely distributed in the eastern United States, differs from the species just described in having more numerous slightly smaller flowers of a more yellow cast and in well grown individuals borne in many short opposite 1-several-flowered cymes. The corolla is one and a half times the length of the calyx; its segments are narrower and more acute than in B. iodandra; the anthers are yellow; the stigma is mostly exserted; and the leaf scales are usually opposite.

Centaurella Moseri Steud. & Hochst. was distinguished from Bartonia verna by its still smaller flowers (4<sup>mm</sup> long) racemosely arranged upon alternate branches, also by its more acutely lobed corolla twice the length of the calyx. The species is represented in herb. Gray by a specimen with the Torrey & Gray label but without data, and by Drummond's specimen from Covington, La., cited in the original description. Both may be merely tall small-flowered specimens of B. verna. They differ from B. iodandra in stature, inflorescence, considerably smaller flowers, narrower much more acute corolla lobes, and yellow anthers. In formerly classing the two plants together the writer placed too great importance upon the alternation of the leaf scales and the relative length of calyx and corolla—points of resemblance which now seem of less weight than the differences above enumerated, which are probably of specific value.—B. L. Robinson, Gray Herbarium, Harvard University.

## NOTES ON SUNDRY AMERICAN PLUMS.

The plum section of the genus Prunus is of great interest to American botanists and of still greater consequence to American horticulturists. But even after much careful work by some of our best botanical and horticultural students there are still many difficulties in the delimitation and description of species. The horticulturists have sought to avail themselves of the botanists' classifications, but have found them in many respects inadequate and ill-fitting; and these horticultural difficulties have, to a considerable degree, reacted upon our ideas of the botanical classification of plums, bringing in doubts and complications which would not have occurred to the botanists working by themselves. At the present time the botany and the horticulture of this group are inseparably linked. The horticultural